

THAT WHICH IS CLAIMED IS:

1. A device for improving venous blood flow in selected portions of the user's body by applying a series of compressive forces thereto, wherein said device comprises:

5 a plurality of sleeves each having at least one inflatable chamber, wherein each sleeve of said plurality is configured to mount upon and conform to a selected portion of said body;

10 an indicator operably attached to at least one of said sleeves for designating a predetermined mode of operation associated with said sleeve;

15 a feeder valve pneumatically connectable to said sleeve for enabling and disabling flow of pressurized air from a pump to said sleeve during an inflation cycle; and

20 a controller, operatively connected to said feeder valve, wherein said controller defines a plurality of modes of operation having differing inflation cycles for controlling the flow of pressurized air to the respective sleeve, and wherein said controller selects the mode of operation based on the designation provided by said indicator.

2. A device according to Claim 1 wherein said device further comprises a connector having opposing ends, wherein one end is operably connected to said sleeve and said opposed end is operably  
5 connected to said feeder valve, and wherein said indicator is disposed in said opposed end of said connector.

3. A device according to Claim 2 wherein said device further comprises a connecting device comprising:

a connector housing having opposed ends,

002221 EEE5260

wherein one end is operably connected to said feeder valve and said opposed end is operably connected to said opposed end of said connector; and  
a sensor operably mounted to said connector housing.

5

4. A device according to Claim 3 wherein said sensor is in operable communication with said indicator such that said sensor senses an indication from said indicator and provides a signal indicative of the mode of operation associated with said sleeve.

5

5. A device according to Claim 4 wherein said controller is in operable communication with said sensor and controls the mode of operation of said device based on the signal provided by said sensor.

6. A device according to Claim 1, wherein said device further comprises a sensor in operable communication with said controller for sensing an indication from said indicator, wherein said sensor provides a signal indicative of the predetermined mode of operation associated with said sleeve connected to said feeder valve.

5

7. A device according to Claim 6, wherein said sensor comprises a Hall Effect sensor and said indicator comprises at least one magnet for providing a magnetic signal that designates the predetermined mode of operation associated with said sleeve.

5

8. A device according to Claim 6, wherein said device further comprises an optical signal generator for generating an optical signal, wherein said indicator defines a level of reflectivity that corresponds to a predetermined mode of operation associated with said sleeve, and wherein said indicator

5

00755313 122700

partially reflects the optical signal generated by said optical signal generator to indicate the predetermined mode of operation associated with said sleeve.

9. A device according to Claim 1 wherein said mode of operation associated with said sleeve corresponds to the number of inflation chambers in said sleeve.

10. A device according to Claim 1 wherein said mode of operation associated with said sleeve corresponds to the selected portion of the body that the sleeve is mounted and conformed.

11. A device according to Claim 1, wherein said indicator comprises a blocking device connected to said feeder valve for restricting the flow of pressurized air from the pump to the sleeve, thereby indicating a first mode of operation.

12. A device according to Claim 11, wherein said controller determines the mode of operation by controlling the pump to provide pressurized air to said feeder valve and monitoring the pressure on said feeder valve to determine if said blocking device is connected to said feeder valve, and wherein said controller selects the mode of operation based on whether the blocking device is connected to the feeder valve.

13. A universal connecting device comprises:  
a connector housing adapted for mating with a connector having a designated mode of operation associated with the connector; and

a sensor, operably mounted to said connector housing, for identifying the mode of operation associated with a connector mated to said connector housing, wherein said sensor provides a signal

indicative of said mode of operation.

14. A universal connecting device according to Claim 13, wherein said device further comprises an indicator operably attached to said connector for designating a predetermined mode of operation associated with said connector.

15. A universal connecting device according to Claim 14, wherein said sensor is a Hall Effect sensor.

16. A universal connecting device according to Claim 15, wherein said indicator comprises at least one magnet configured to designate the mode of operation associated with said connector, and wherein said sensor provides a signal indicative of the mode of operation designated by said indicator.

17. A universal connecting device according to Claim 13 wherein said device further comprises an optical signal generator for generating an optical signal, wherein said indicator defines a level of reflectivity that corresponds to a predetermined mode of operation, and wherein said indicator partially reflects the optical signal generated by said optical signal generator to indicate the predetermined mode of operation associated with said sleeve.

18. A universal connecting device according to Claim 13 wherein said device comprises first and second connectors for operably mating to each other, and wherein said first connector includes an indicator for indicating a mode of operation associated with said first connector and said second connector includes a sensor for providing a signal indicative of the mode of operation associated with the first connector.

09755313.122700

19. A universal connecting device according to Claim 13 further comprising at least one pressure device for generating a pressure, wherein said indicator defines a blocking device that blocks the release of pressure from said pressure device to indicate a first mode of operation, and wherein the sensor identifies the mode indicated by said indicator by sensing the pressure blocked by said indicator.

20. A method for improving venous blood flow in a selected portion of the user's body by applying a series of compressive forces thereto, wherein said method comprises the steps of:

5 mounting at least one sleeve of a plurality of sleeves on a selected portion of the body, wherein said sleeve includes at least one inflatable chamber; providing an indication from said sleeve that designates a predetermined mode of operation associated with said sleeve; and  
10 controlling the flow of pressurized air to said sleeve based on the mode of operation indicated in said providing step.

21. A method according to Claim 20 wherein said method further comprises the step of sensing the indication provided by said providing step.

22. A method according to Claim 21, wherein said providing step comprises the step of providing a magnetic signal designating a selected mode of operation, and wherein said sensing step comprises the  
5 step of sensing the magnetic signal.

23. A method according to Claim 22, wherein said providing step comprises the step of providing a plurality of magnetic signals designating a selected mode of operation, and wherein said sensing step

00755313-122700

comprises the step of sensing the magnetic signal.

24. A method according to Claim 20 wherein said method further comprises the step of directing a light signal on an indicator attached to said sleeve, such that said providing step comprises the step of partially reflecting said light, and wherein said amount of reflection indicates a predetermined mode of operation associated with said sleeve.

25. A method according to Claim 21, wherein said method further comprises the step of generating a pressure for applying to said inflatable chamber, wherein said providing step comprises blocking the pressure, thereby indicating a first mode of operation, and wherein said sensing step comprises sensing the pressure blocked in said providing step to thereby determine the mode of operation indicated in said providing step.

26. A method for selecting an operation mode from a plurality of operation modes of a processing device based on identifying a characteristic of a connector connected thereto, wherein said method includes the steps of:

mating said connector to said processing device;

providing an indication from said connector, wherein said indication designates a predetermined mode of operation;

sensing said indication from said indicator of said connector; and

configuring said process device to operate in the predetermined mode of operation designated by said connector.

27. A method according to Claim 26 wherein

09755313-122700

said providing step provides a magnetic signal designating a predetermined mode of operation and wherein said sensing step comprises the step of sensing the a magnetic signal provided in said providing step.

28. A method according to Claim 26 wherein said method further comprises the step of directing an optical signal to an indicator attached to said connector, wherein said providing step comprises the  
5 step of partially reflecting said optical signal, wherein said reflected signal represents a predetermined mode of operation for said process device, and wherein said sensing step comprises the  
10 step of sensing a reflected optical signal from said indicator.

29. A method according to Claim 26, wherein said method further comprises the step of generating a pressure for applying to said connector, wherein said providing step comprises blocking the pressure, thereby indicating a first mode of operation, and wherein said sensing step comprises sensing the pressure blocked in said providing step to thereby determine the mode of operation indicated in said providing step.

00755313-122700